

ABSTRACT

The present invention relate to collecting colloidal solids in suspension for removal, for its drying and recovery, including in a scrubber as shown in my US Patent No 6,180,012, where colloidal solids is made and is in suspension and in its clarifier located below, where some of the colloidal solids is washed down and is in suspension in desalinated seawater. Tubes with negative DC charge, attract build up of colloidal solids on their surfaces, and one loaded tube at the time is removed to a room or enclosure for drainage and drying with dry air. Thereafter the tube's DC charge is changed to positive, loosening the tube's grip and attraction to the colloidal solids which is blown through an outlet into a settling tank and down on a bottom screw conveyor that delivers the dry colloidal solids with little adhesion, to centrifuge for separation of the solids. From one of the solids is ammonia recycled for the process, which is important for saving cost, energy and production of C_2 .

The present invention also relates to processes for further improving much desalination of potable seawater with less emission of CO_2 and sterilization, flocculation and removal of organics all important for drinkable water by the present invented processes..